

What is claimed is:

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Cont 1. An image input apparatus comprising:

a photoelectric converter element having a flat photosensitive surface; and
an image formation unit array having a plurality of image formation units

5 arranged in an array,

wherein the plurality of image formation units individually receive light
beams substantially from an identical area and focus the received light beam on
different regions of the photosensitive surface of the photoelectric converter
element to form images thereon.

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2. An image input apparatus as claimed in claim 1,

wherein the individual images formed on the different regions are images of
an object lying in the area as seen from different view points.

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3. An image input apparatus as claimed in claim 1, further comprising:

a restricting member for restricting, independently for each of the plurality
of image formation units, optical paths along which the light beams are focussed.

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4. An image input apparatus as claimed in claim 3,

wherein the restriction member is realized as partition walls.

5. An image input apparatus as claimed in claim 4,

wherein those pixels of the photoelectric converter element which output a
bright-state signal when light enters the plurality of image formation units are

regarded as effective pixels.

6. An image input apparatus as claimed in claim 3,
wherein the restricting member is a polarizing filter array having polarizing
filters arranged one for each group of the plurality of image formation units, every
two adjacent polarizing filters having mutually perpendicular polarization angles.

7. An image input apparatus as claimed in claim 1, further comprising:
deflecting members provided one for each of the plurality of image formation
units.

8. An image input apparatus as claimed in claim 1, further comprising:
spectroscopic members provided one for each of the plurality of image
formation units.

9. An image input apparatus as claimed in claim 1, further comprising:
a signal processing system for processing signals obtained as a result of
photoelectric conversion performed by the photoelectric converter element by
using processing functions provided one for each of the plurality of image
formation units.

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